

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended): Mineral wool capable of dissolving in a physiological medium, ~~characterized in that it~~ wherein the wool comprises the constituents below in the following percentages by weight:

SiO ₂	39-44%, preferably 40-43%
Al ₂ O ₃	16-27%, preferably 16-26%
CaO	6-20%, preferably 8-18%
MgO	1-5%, preferably 1-4.9%
Na ₂ O	0-15%, preferably 2-12%
K ₂ O	0-15%, preferably 2-12%
R ₂ O (Na ₂ O + K ₂ O)	10-14.7%, preferably
—————	10-13.5%
P ₂ O ₅	0-3%, especially 0-2%
Fe ₂ O ₃ (total iron)	1.5-15%, especially 3-8%
B ₂ O ₃	0-2%, preferably 0-1%
TiO ₂	0-2%, preferably 0.4-1%

wherein the wool comprises at least 2% MgO when alumina is present in an amount of less than 22%.

2. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that~~ wherein the CaO content is between 9.5 and 20%.

3-4. (Canceled).

5. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that~~
wherein the alkali metal oxide content is less than or equal to 13.0%.

6. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that~~
wherein the R_2O/Al_2O_3 molar ratio is less than 0.9.

7. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that it~~
~~contains~~ wherein the wool comprises 2 to 6% iron oxide.

8. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that it~~
~~contains~~ wherein the wool comprises 1% or less of titanium oxide.

9. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that it~~
wherein the wool has a viscosity at a temperature of 1400°C of more than 70 poise.

10. (Currently Amended): Mineral wool according to claim 1, ~~characterized in that~~
~~its composition~~ wherein the wool has a shrinkage at 700°C of less than 40% and a shrinkage
at 800°C of less than 90%.

11. (Currently Amended): A fire-resistant structural system comprising ~~The method~~
~~of using a mineral wool according to claim 1 in fire-resistant structural systems or as~~
~~insulation employed at high temperature.~~

12. (New): Insulation comprising a mineral wool according to claim 1.
13. (New): Mineral wool according to claim 1, wherein the SiO_2 content is between 40 and 43%.
14. (New): Mineral wool according to claim 1, wherein the Al_2O_3 content is between 16 and 26%.
15. (New): Mineral wool according to claim 1, wherein the CaO content is between 6 and 20%.
16. (New): Mineral wool according to claim 1, wherein the MgO content is between 1 and 4.9%.
17. (New): Mineral wool according to claim 1, wherein the Na_2O content is between 2 and 12%.
18. (New): Mineral wool according to claim 1, wherein the K_2O content is between 2 and 12 %.
19. (New): Mineral wool according to claim 1, wherein the $\text{Na}_2\text{O} + \text{K}_2\text{O}$ content is between 10 and 13.5%.
20. (New): Mineral wool according to claim 1, wherein the P_2O_5 content is between 0 and 2%.
21. (New): Mineral wool according to claim 1, wherein the Fe_2O_3 (total iron) content is between 3.2 and 8%.
22. (New): Mineral wool according to claim 1, wherein the B_2O_3 content is between 0 and 1%.
23. (New): Mineral wool according to claim 1, wherein the TiO_2 content is between 0.4 and 1%.